

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF OKLAHOMA

LAZY S RANCH PROPERTIES, LLC, an
OKLAHOMA LIMITED LIABILITY
COMPANY,

Plaintiff,

v.

Case No. 19-CV-425-JWB

VALERO TERMINALING AND
DISTRIBUTION COMPANY, et al.,

Defendants.

MEMORANDUM AND ORDER

This matter came on for hearing February 5-6, 2025, on Defendants’ pending *Daubert* motions. At the hearing, the court addressed Defendants’ motions, which requested an order excluding testimony from Plaintiff’s experts Trae Miller, III, Dr. J. Berton Fisher, Dr. Kenneth J. Ede, Dr. Kevin Boyle, and Dr. Tamzen Macbeth. (Docs. 389, 390, 391, 392, 393.) The court also took up a motion to disqualify Kiefner and Associates, Inc. (“Kiefner”) and Trae J. Miller III based on a conflict of interest. (Doc. 386, 395.) After hearing all testimony, the court denied the motion to disqualify Kiefner and Miller from the bench and took the motions to exclude Plaintiff’s experts under advisement. The court now rules on the motions previously taken under advisement.

I. Facts

The facts in this case have previously been set out by the court. (Doc. 316, 335, 357, 375.) Briefly repeated here, Plaintiff owns and runs cattle operations on 6,150 acres of real property in Carter County, Oklahoma (the “Lazy S Ranch” or “property”). The Roos family bought the property for approximately \$8.6 million in December 2017. The Lazy S Ranch lies above a portion

of the Arbuckle-Simpson Aquifer, which covers an area of over 500 square miles in south central Oklahoma. The aquifer feeds numerous freshwater springs and clear running streams in the region.

Several pipelines cross the property. Central to this case is a 12-inch refined products pipeline operated by Valero (the “Wynnewood Pipeline”). The Wynnewood Pipeline carries gasoline and diesel from Valero's refinery at Ardmore to a refined products terminal at Wynnewood, some 30 miles to the north. Approximately three miles of the Wynnewood Pipeline is located beneath the property. This section of the pipeline runs essentially in a north-south direction about 0.5 miles east of Highway 77. The pipeline also runs about 0.5 miles east of a spring called Tulip Springs in the northwest corner of the property near Highway 77.

In July 2018, Robert Charles “Cinco” Roos, a representative of Lazy S Ranch, claims to have smelled a diesel fuel odor emanating from Tulip Springs. Plaintiff then retained multiple experts with experience in the fields of pipeline integrity and environmental contamination and began investigating. These experts included Trae Miller, who traversed the entire portion of the Wynnewood Pipeline crossing the ranch and reviewed all of Valero's pipeline integrity data from 2009-present; Dr. J. Berton Fisher, who collected samples of environmental media on the property; and Dr. Kenneth Ede, who offered opinions on the analyzed soil, water, and air samples that were taken. (Doc. 128, 130, 131, 197, 200, 201.) Plaintiff's experts contend the Wynnewood Pipeline is leaking refined petroleum products into the soil, water, and air on the property. Plaintiff also retained Dr. Kevin J. Boyle to determine the property's potential lost water sales due to the alleged contamination of the Arbuckle-Simpson aquifer underlying the property, and Dr. Tamzen Macbeth to determine both damages to the property and necessary remediation costs regarding the alleged spills from the Wynnewood Pipeline (Doc. 129, 132, 196.)

In December 2019, Plaintiff filed suit against Defendants, who are all related entities

operating the pipeline, alleging eleven claims under Oklahoma state law. After extensive discovery, the undersigned granted summary judgment for Defendants on December 2, 2022. (Doc. 316.) After Plaintiff prevailed on appeal to the Tenth Circuit, this case was remanded for a trial on the issues of “negligence per se, private nuisance, and public nuisance including Lazy S’s claims for damages.” *Lazy S Ranch Props., LLC v. Valero Terminaling & Distrib. Co.*, 92 F.4th 1189, 1208 (10th Cir. 2024).

On remand, Defendants filed motions to exclude all of Plaintiff’s expert witnesses under the *Daubert* standards of Federal Rule of Evidence 702.¹ (Docs. 389, 390, 391, 392, 393.) After full briefing on Defendant’s *Daubert* motions (Docs. 399, 401, 402, 403, 405, 408, 409, 410, 411, 412), the court held a hearing on February 5-6, 2025. On the first day of hearings, the court heard testimony from Trae Miller and Dr. J. Berton Fisher. (Doc. 414, 419.) On the second day of hearings, the court heard from Dr. Kenneth J. Ede, Dr. Kevin Boyle, and Dr. Tamzen Macbeth. (Doc. 415, 420.) At the conclusion of the hearings, the court took the *Daubert* motions under advisement.

II. Standard

Generally, district courts have broad discretion to determine whether a proposed expert may testify. *United States v. Nichols*, 169 F.3d 1255, 1265 (10th Cir. 1999). Federal Rule of Evidence 702, which controls the admission of expert witness testimony, provides:

- A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
 - (b) the testimony is based on sufficient facts or data;

¹ Plaintiff also retained Philip J. Isaacs to determine the effect of the alleged contamination on the value of the property. (Doc. 127, 198, 199.) Although Defendants also moved to exclude his testimony (Doc. 388), Mr. Isaacs was not present at the *Daubert* hearing due to personal health circumstances. Plaintiff has subsequently substituted Matthew Trimble for Mr. Isaacs. (Doc. 413, 422, 423.) Accordingly, the court will leave for another day the *Daubert* motion regarding Mr. Trimble and Mr. Isaacs’ report.

- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. The proponent of expert testimony bears the burden of showing the expert testimony is admissible. *Hampton v. Utah Dep't of Corr.*, 87 F.4th 1183, 1201 (10th Cir. 2023). “First, the Court determines whether the expert is qualified by knowledge, skill, experience, training or education to render the opinion.” *Lippe v. Howard*, 287 F. Supp. 3d 1271, 1277-78 (W.D. Okla. 2018). After determining an expert is qualified, “the district court must satisfy itself that the testimony is both reliable and relevant, in that it will assist the trier of fact, before permitting a jury to assess such testimony.” *Schulenberg v. BNSF Ry. Co.*, 911 F.3d 1276, 1282 (10th Cir. 2018) (quoting *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009) (en banc)). “Expert testimony which does not relate to any issue in the case is not relevant and, ergo, non-helpful.” *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 591 (1993) (citation omitted). Generally, a district court should focus on a proffered expert’s methodology and “not on the conclusions that they generate.” *Id.* at 595. However, an expert's conclusions are not immune from scrutiny: “A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.” *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). *See also Dodge v. Cotter Corp.*, 328 F.3d 1212, 1222–23 (10th Cir. 2003).

III. Analysis

The court currently has motions under advisement regarding five of Plaintiff’s experts, and so the court will address each expert in the order they were presented at the *Daubert* hearing.

A. Trae Miller, III

Trae Miller, III, is a licensed professional engineer, attorney, and serves as the President and Chief Engineer at Kiefner. He was retained by Plaintiff to opine on the state of the

Wynnewood Pipeline that runs across the property. In his Rule 26 report, Mr. Miller proposes a main conclusion that the Wynnewood Pipeline is leaking refined petroleum products from at least one seep in the Arbuckle Mountain uplift area. (Doc. 128.) In support of this conclusion, Mr. Miller also proposes thirteen supporting opinions. Defendants assert that Mr. Miller's opinions are inherently speculative or otherwise "irrelevant to the core issues underlying the case." (Doc. 390 at 2.)

As an initial consideration, the court finds that Mr. Miller is qualified to offer opinions on the state of the Wynnewood pipeline. He has worked in engineering for over 25 years and has been involved in numerous oil and gas pipeline projects, including designing and constructing pipeline and transmission infrastructure. As such, his education, background, and professional experience satisfies the requirements of Rule 702(a).

Moving to Mr. Miller's opinions, he intends to offer thirteen supporting opinions to buttress his primary conclusion that the Wynnewood pipeline is leaking on the property. While most of his supporting opinions relate to attributes of the Wynnewood pipeline or Defendants' maintenance of the pipeline, Mr. Miller also offers supporting opinions regarding federal regulations and alleged violations of these regulations by Defendants. In *Daubert*, the Supreme Court held that Rule 702 imposes a special obligation upon trial judges to "ensure that any and all scientific testimony . . . is not only relevant, but reliable." 509 U.S. at 589. For an expert opinion to be relevant, it must "logically advance[] a material aspect of the case . . . [or] have a valid scientific connection to the disputed facts in the case." *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 884 n.2 (10th Cir. 2005). Irrelevant evidence which does not make a fact of consequence more or less probable is inadmissible. *See* Fed. R. Evid. 402. At the hearing, Mr. Miller testified about the pipeline attributes and Defendants' internal line inspections, but the court did not allow

him to testify as to his opinions regarding federal regulations. His testimony convinces the court that Mr. Miller possesses sufficient facts and data to offer his primary conclusion regarding at least one seep on the property. However, the court now must address his supporting conclusions.

First, Mr. Miller's supporting opinion 1 proffers that there are visible leaks at the Mt. Vica Drive main line valve station. However, it is uncontested by the parties that the Mt. Vica Drive main line valve station is not relevant to Plaintiff's claim regarding a spill or leak from the Wynnewood pipeline. (Doc. 419 at 85:15–86:7.)² Rather, Mr. Miller appears to be using the Mt. Vica Drive main line valve station as an example of how Defendants are failing to properly maintain the pipeline. (*Id.*) Nevertheless, Tulip Springs, which contains the alleged refined product contaminant discharge, is geographically and geologically separate from the Mt. Vica Drive station. Indeed, Plaintiff conceded at the hearing that the minor drips at this valve station have no real relevance to the issues remaining in the case. (*Id.*) Moreover, there is no connection in Mr. Miller's report between his observations at the Mt. Vica Drive main line valve station and his conclusion that there is a seep on the Wynnewood Pipeline. Thus, this supporting conclusion is not relevant. Furthermore, to the extent the evidence of minor drips at this valve station has any relevance to a potential seep in the Wynnewood Pipeline, it is substantially outweighed by the risk of unfair prejudice, confusing the issues, and misleading the jury due to Plaintiff potentially seeking to introduce this evidence of a visible leak above the ground in a location remote from the situs of the alleged harm as a substitute for actual evidence of an underground leak from the pipeline, which is notably lacking in this case. *See, e.g., McKenzie v. Hanover Ins. Co.*, 722 F. Supp. 3d 1226, 1235 (E.D. Okla. 2024) (excluding an expert opinion as not relevant since it was related to a claim that had been dismissed from the case). Defendants' motion to exclude Mr.

² There are two days of hearing transcripts at Docs. 419 and 420. For ease of notation, the court will cite to the page and line number used by the court reporter in the transcripts rather than the page imposed by the ECF system.

Miller's testimony is granted as to his supporting opinion 1.

Second, Mr. Miller offers opinions regarding alleged violations of the Code of Federal Regulations ("C.F.R."), including the Pipeline and Hazardous Materials Safety Administration (PHMSA) rule, 49 C.F.R. Part 195, et seq. (Doc. 128 at 43, 56, opinions 8 and 13.) Defendants move to exclude these opinions as irrelevant since the only surviving negligence per se claim is alleged to be a violation of an Oklahoma statute and related regulation, and the C.F.R. and PHMSA rules "do not make it more probable or not that Valero released or discharged refined petroleum products on the Lazy S Ranch." (Doc. 390 at 11.) In its remand order, the Tenth Circuit Court of Appeals was very specific about the statutes and regulations on which Plaintiff relies for its negligence per se claim. *Lazy S Ranch Properties, LLC*, 92 F.4th 1201-02. Upon reviewing Plaintiff's arguments, the Tenth Circuit concluded that only Okla. Stat. tit. 27A, § 2-6-105(A) and Okla. Admin. Code § 165:10-7-5 were applicable to the negligence per se claim at issue here. *Id.* at 1202-04. Accordingly, issues and opinions related to the C.F.R. and the PHMSA rules are not relevant to the negligence per se claim. *McKenzie*, 722 F. Supp. 3d at 1235. Therefore, Mr. Miller will not be allowed to testify as to his supporting opinion 8 regarding PHMSA rule 49 C.F.R. § 195.52(c), nor will he be allowed to testify to other PHMSA violation notices as a basis for the negligence per se claim in his supporting opinion 13. To be clear, to the extent that Mr. Miller or any other expert relies on the C.F.R. to offer information or provide a basis for some other opinion not otherwise excluded, they are free to explain that connection. *See Specht v. Jensen*, 853 F.2d 805, 809–10 (10th Cir. 1988) (en banc) (holding that "a witness may refer to the law in expressing an opinion . . . [but cannot] direct jury's understanding of the legal standards upon which their verdict must be based"). However, neither Mr. Miller nor any other expert may testify about the violation of the C.F.R. as a basis for any negligence per se liability. Thus, Defendants' motion to

exclude Mr. Miller's testimony is granted as to his supporting opinion 8 and also granted with respect to supporting opinion 13 insofar as it relates to the negligence per se claim.

Third, Mr. Miller offers opinions related to Defendants' internal policies (supporting opinion 9), documentation (supporting opinion 10), and risk assessment (supporting opinion 11), and Defendants argue that they should be excluded because they are irrelevant and not helpful for the jury. The court agrees. These opinions do not address any issues at the heart of the litigation and are therefore irrelevant. *See, e.g., In re: Ethicon, Inc. Pelvic Repair Sys. Prod. Liab. Litig.*, No. 2327, 2016 WL 4536456, at *3 (S.D.W. Va. Aug. 30, 2016) (excluding the opinions of an expert regarding medical complications when the complications were not at issue in the case). Whether or not the Defendants properly categorized Lazy S Ranch in violation of a PHMSA rules is not at issue in the remaining claims in this case. In the same way, Mr. Miller's argument that Defendants are falsifying documents or doing minimal documentation is not supported by sufficient facts and is not helpful for a jury deciding whether the Wynnewood Pipeline is leaking. Instead, it only serves to introduce unfounded prejudice. Finally, arguing that Defendants' risk assessments are understated and incomplete is intended to "create[] a negative inference that VALERO is not managing risks effectively," (Doc. 128 at 53) without showing any data that they are negligent in the operation of the Wynnewood Pipeline. In sum, Defendants are not on trial for being a bad operator, for paperwork violations, or for anything else that might cause environmental or other harms in the future; rather, Defendants are facing claims that their pipeline is leaking now and that they are legally responsible for the consequences of that leak. Therefore, Defendants' motion to exclude Mr. Miller's testimony is granted regarding supporting opinions 9, 10, and 11. Mr. Miller is certainly allowed to point out any inconsistencies in Defendants' documents when offering his other opinions but will not be allowed to testify as to Defendants purposely obfuscating

or falsifying their records.

Given the above conclusions, the court holds that Mr. Miller will be allowed to offer his primary opinion that the Wynnewood pipeline is leaking from at least one seep on the Lazy S Ranch in addition to his supporting opinions not otherwise addressed above, even though he cannot point to any one specific point on the pipeline which is leaking. Therefore, Defendants' motion is granted as to Mr. Miller's supporting opinions 1, 8, 9, 10, 11, and parts of 13, but otherwise denied.

B. Dr. J. Berton Fisher

Dr. J. Berton Fisher was retained by Plaintiff to offer opinions regarding hydrocarbon contamination of the Arbuckle-Simpson Aquifer and offer opinions connecting the hydrocarbons discovered both at Tulip Springs and elsewhere on the Lazy S Ranch to the Wynnewood Pipeline. (Doc 131.) Dr. Fisher plans to offer his conclusions that the Wynnewood Pipeline is the cause of this contamination based on the water, soil, and air samples which he obtained from the property to test the level of hydrocarbons. Defendant maintains that Dr. Fisher lacks sufficient data to reach his conclusions and that he has failed to adequately account for alternative sources of hydrocarbon contamination at the Lazy S Ranch. (Doc. 393.) It is certainly clear that Dr. Fisher has the necessary qualifications to offer his opinions, as he obtained a PhD in Earth Sciences from Case Western Reserve University and has over thirty years of relevant experience in geochemistry. (Doc. 200 at 116-157.) Moreover, he is an adjunct Professor at Oklahoma State University teaching hydrogeology and site assessment, and he has dozens of relevant publications and presentations on these and similar geochemistry topics. However, he cannot conclusively show that the Wynnewood Pipeline is the origin of the hydrocarbons found in some of his samples, nor does he have any test data that shows the Arbuckle-Simpson Aquifer is actually contaminated. Thus, the court is left to evaluate his conclusions considering the data presented at the hearing.

First, the court finds that Dr. Fisher has repudiated his samples obtained using Bio-Sep beads in Bio-Trap Samplers. At the *Daubert* hearing, he openly stated that he questioned their reliability, even though he used them as one of the two sampling methods for his water samples (the other being polypropylene cloth hydrocarbon collectors). (*See, e.g.*, Doc. 419 at 204:22–205:20; 210:2–9.) Therefore, he will not be allowed to present any data or conclusions which rely on the Bio-Trap sampling methods. However, the court is persuaded that the use of polypropylene cloth hydrocarbon collectors is sufficiently reliable for Dr. Fisher to use the data obtained from them. Even though Defendants questioned the reliability of the polypropylene cloth hydrocarbon collectors and presented their potential to taint the resulting gas chromatograms, the court is persuaded that there is enough difference in the gas chromatograms between the control and the field samples to satisfy Rule 702’s reliability standards and allow the jury to consider this evidence and that this information could also be helpful to the jury.

Second, the soil, water, and air samples obtained by Dr. Fisher are suggestive of hydrocarbon presence in the karst geology on the Lazy S Ranch; however, these samples fail to show contamination of the Arbuckle-Simpson Aquifer. Dr. Fisher did not take any samples from the Arbuckle-Simpson Aquifer to show that it has actually been contaminated, but rather assumes the aquifer is contaminated given the direction of groundwater flow, local geology, and various samples taken from springs at the property and from a monitoring well drilled near the Blue Knight Pipeline. This assumption, and the evidentiary support for it, merits further discussion.

At the *Daubert* hearing, the court questioned Dr. Fisher at some length on matters related to whether any testing was done to validate the assumption that refined petroleum products are reaching the Arbuckle-Simpson Aquifer and, more importantly, to validate the modeling of the hypothetical benzene plume that Dr. Fisher advances and on which other experts rely (some

heavily) in support of various theories of damages. (Doc. 419 at 236:6–249:13.) In response to the court’s questions, Dr. Fisher generally maintained the view that, because the geologic formations that compose the Arbuckle-Simpson Aquifer are highly tilted on the Lazy S Ranch, the aquifer includes all the soils and strata on the relevant portion of the property, all the way to the surface. (*Id.* at 237:15–17; 240:24–241:16; 249:16–250:2.) Consequently, he argued that any soil contamination and any contamination in the springs or elsewhere constitutes contamination of the Arbuckle-Simpson Aquifer. (*Id.*) While this proposition may be true in a broad, theoretical sense, it is not helpful here because Plaintiff has defined substantial material distinctions between the near-surface soils, the intermittent springs, the consolidated strata between the surface and the saturated portion of the aquifer, and the saturated portion of the aquifer itself (which is generally always filled with water). For instance, Plaintiff has made common use of a conceptual model that shows the pipeline, Tulip Springs, perched water, and the saturated portions of the Arbuckle-Simpson, among many other things, in an effort to explain the complex behavior of subsurface fluids in the area of the property. (Doc. 143-1 at 10 [Fisher Report Ex. 23]; Doc 144-1 at 1 [Fisher Report Ex. 25].) That model clearly shows the leaking pipeline with contaminants migrating downward through cracks and channels in the underlying rock, then reaching a layer of water that connects to Tulip Springs, and then a further descent to the saturated region of the aquifer.

Dr. Fisher’s analysis draws clear distinctions between the behavior of alleged contaminants above the saturated part of the aquifer and the behavior of those contaminants once they reach the water table. For example, above the water table, he suggests that these petroleum fluids may pool and build up until a storm event washes them out of their pools and transports those fluids to outlets like Tulip Springs or further down toward the water table. By contrast, once those fluids reach the water table, Dr. Fisher purports to model their transport and dispersion using his Domenico (1987)

transport and reaction groundwater computer model. In fact, Dr. Fisher admits that the Domenico model is “unsuitable for modeling” the contaminants above the saturated portion of the aquifer because “[t]he Domenico model, like many models, is really only applicable to what's called a fully saturated circumstance, that is, all the pore space or all the permeability is occupied by water.” (Doc. 419 at 242:5–22.) This is a critical distinction because Dr. MacBeth, among others, relies almost exclusively on Dr. Fisher’s modeling to support her conclusions that a multi-million-dollar pump-and-treat remediation program is necessary to restore the saturated part of the Arbuckle-Simpson Aquifer to its pre-leak condition. Accordingly, when the court questioned Dr. Fisher on whether any testing or sampling had been done to confirm that the Arbuckle-Simpson itself was contaminated, it was not sufficient that he merely pointed out that evidence of soil and spring water contamination showed the aquifer was contaminated. (*Id.* at 249:16–250:2.) Instead, as the court explained to Dr. Fisher at the hearing, the point of that inquiry was to determine whether any testing had been done to validate both the inputs being given to the Domenico model and the results yielded by the Domenico model with respect to the saturated part of the aquifer and alleged contaminant plumes contained therein. Spread over several pages of the transcript, the discussion proceeded, in relevant part, as follows:

THE COURT: So is there going to be any other evidence³ in the case that gives quantitative sampling of the location and concentrations of hydrocarbons in the Arbuckle-Simpson aquifer? Mr. Page?

MR. PAGE: Your Honor, my reading of Dr. Fisher's report, and he can correct me, is that the aquifer starts at the surface, because of this anticline, um, geology, where the sediment beds move up on their side.

....

MR. PAGE: And so if there is a spill at the surface, it's going to eventually work its way into the main aquifer. Dr. Fisher, am I correct or wrong on that?

THE WITNESS: That's correct.

³ This reference to “other evidence” is in the context of having just discussed the single borehole, out of a number of such boreholes, that produced any detectable concentration of contaminants in the water underlying the property. This borehole and testing evidence is discussed in more detail later in this order.

(Doc 419 at 240:19–241:9.) The court later went on to ask:

THE COURT: And so what is the actual evidentiary sampling data that allows you to provide your inputs to the model?

You have to have -- as I understand it I think, you have to have some starting point where you tell the model they have -- it has a certain size or concentration, or some measure of the hydrocarbons, whether that is treated as a point source, or some shape or volume, and then it takes these other various inputs and somehow calculates how far the plume reaches and seems rather important, given that you're finding that plume only goes 600 and something feet, so it's one of the things I'm gleaning from that is that this -- to the extent there is contamination in this aquifer, it's not going miles and miles it's, you know, 600 feet, that's less than a fifth of a mile, still on the ranch. And we're asking the jury to do a lot with that information so what's the data that supports the inputs to the model?

(*Id.* at 245:3–21.) Dr. Fisher's answer to this question spanned over a page of the hearing transcript and focused on assumptions about the amount of benzene released into the aquifer rather than describing any testing or measurements to actually confirm the amounts or concentrations of contaminants reaching the aquifer in the first instance. Sensing that Dr. Fisher either misapprehended the focus of the court's question regarding "actual evidentiary sampling data that allows you to provide your inputs to the model" (*Id.* at 245:4–5) or was hoping to avoid that part of the question, the court attempted to re-focus Dr. Fisher's attention on the heart of the inquiry:

THE COURT: And do we have any in situ measurements of contaminate [sic] concentration levels in the aquifer that validate the information that we're feeding to this model?

THE WITNESS: Only our hydraulic conductivity and gradient.

....

THE COURT: So we don't have any measurements of actual contamination in the aquifer within this calculated plume that we go down and we say, Oh, we took a sample, the model says X, the sample says Y, and they're pretty doggone close, so the model must be giving us a good picture of what's going on down there.

THE WITNESS: No, we would have to know exactly where the plume is, and as you've indicated, it is really small so trying to find it by drilling would be a stringent task.

THE COURT: . . . Dr. Macbeth is going to -- wants to tell a jury it is going to take \$44 million to drill wells and clean that thing up. If we're going to do that, why -- if we think we can hit [the contamination plumes] with those wells to clean

it up, why can't we hit it with a test well or two to validate the data that we're going to ask a jury to rely on for a \$40 million damage model?

THE WITNESS: I don't have an answer for that, Your Honor.

(Doc. 247:1–248:4.) Thus, while Plaintiff maintains that it has proof of aquifer contamination in the broadest sense of that term (namely evidence of soil contamination and contaminants in some of the springs on the ranch), Plaintiff has no actual proof whatsoever that the computer-modeled contamination plumes generated by Dr. Fisher's Domenico model actually exist, where the plumes are located, how large they are, or even which contaminants they contain and in what concentrations. That's what the court means when it says that Plaintiff has no evidence to show that the Arbuckle-Simpson Aquifer is actually contaminated.

Indeed, the only efforts that Plaintiff appears to have made to obtain this crucial evidence is sampling done on four of the boreholes Plaintiff drilled on the ranch between the Wynnewood Pipeline and Tulip Springs. (Doc. 131 at 33–34; Doc. 143-1 at 6 [Fisher Report Ex. 19].) Plaintiff's evidence indicates that water samples were taken from boreholes numbered 01, 19, 10, and 16. (Doc. 161 [Fisher Report Summary Exhibit A].) These samples were tested for benzene, toluene, ethylbenzene, xylene, total petroleum hydrocarbons – gasoline range organics, and total petroleum hydrocarbons – diesel range organics. (*Id.*) The samples showed no detectable contaminants except for a trace amount of toluene in a single borehole, DH-19. (*Id.*) The actual reported value of toluene in the one positive sample was reported as 2.03 micrograms per liter, which is almost 500 times lower than the EPA limit for toluene in water of 1 milligram per liter (or 1000 micrograms per liter). *See* 40 C.F.R. § 141.50 (1994). Moreover, this borehole is located to the west of the Wynnewood Pipeline, immediately adjacent to the former Blue Knight Pipeline, and almost half the distance between the Wynnewood Pipeline and Tulip Springs. (Doc. 143-1 at 6 [Fisher Report Ex. 19].) This is a significant fact because Dr. Fisher explained that the plumes

would form in the general direction of natural groundwater flow. (Doc. 131 at 38–39; Doc. 144-1 at 1 [Fisher Report Ex. 25].) As discussed at the hearing, Exhibit 15 from Dr. Fisher’s report shows the prevailing directions of groundwater flow during non-storm events on the Lazy S Ranch. (Doc. 419 at 149:16–23.)⁴ It is clear from Exhibit 15 that prevailing groundwater flow would not allow any plume resulting from leakage from the Wynnewood Pipeline to establish where borehole DH-19 was located. (Doc. 142-1 at 16 [Fisher Report Ex. 15].) Accordingly, Plaintiff has failed to produce a shred of evidence to validate Dr. Fisher’s conclusions that the Domenico model’s contamination plumes are sufficiently reliable that Dr. MacBeth can use them to ask the jury for a \$40 million groundwater remediation program. In fact, it appears that Plaintiff did not even try to obtain evidence to validate the model.

The court is somewhat stupefied by this glaring evidentiary gap but does understand how the course of the litigation led to this situation. The lion’s share of Plaintiff’s \$80 million damage model is based on contamination of the Arbuckle-Simpson Aquifer. Sampling and testing can be expensive. Defendants certainly do not want to bear the expense of testing because Plaintiff bears the burden of proof, and Defendants’ testing of the aquifer could substantiate Plaintiff’s claims of contamination, thus snatching defeat from the jaws of victory. Similarly, Plaintiff doesn’t want to pay for expensive testing, especially considering the risk that it might show a lack of contamination, thereby undermining the bulk of Plaintiff’s damage claims. Thus, we have the situation where neither side wants to take the risk of bad news from groundwater sampling. Defendants have decided to simply rely on Plaintiff’s failure to test the aquifer, while Plaintiff has decided to argue that common sense is enough for the jury to conclude that contamination has reached the aquifer in quantities sufficient to support Plaintiff’s assumptions. Whatever Plaintiff’s

⁴ Hearing Exhibit V20 was identified as Exhibit 15 from Dr. Fisher’s expert report. (Doc. 419 at 146:23–24.)

motive for the current evidentiary gap, this lack of data on the Arbuckle-Simpson Aquifer itself means that any opinion offered on its contamination is inherently speculative. *Mitchell v. Gencorp Inc.*, 165 F.3d 778, 781 (10th Cir. 1999) (“Absent supporting scientific data, [an expert’s] conclusions are little more than guesswork. Guesses, even if educated, are insufficient [to draw a conclusion]”); *Belisle v. BNSF Ry. Co.*, No. CIV. 08-2087-EFM, 2010 WL 1424344, at *10 (D. Kan. Apr. 5, 2010) (holding an expert opinion is speculative where the expert “[had not] provided any other foundation for [his] opinion”). Accordingly, Dr. Fisher will not be allowed to opine that the aquifer is contaminated by hydrocarbons because that opinion is not based on sufficient facts and data, and he certainly may not attempt to quantify that conjecture with assumptions regarding leak rates and all the other data inputs necessary for any computer modeling on the alleged contamination plumes within the aquifer. This includes offering his opinions regarding the Domenico analytical transport and reaction groundwater plume model. However, given the soil, water, and air samples that Dr. Fisher directly obtained from the Lazy S Ranch, Dr. Fisher will be allowed to opine about the soil contamination on the property, the contamination in the springs, and the air samples that he obtained, even going so far as to render an opinion that a leak in the Wynnewood Pipeline is the source of the hydrocarbons.

Thus, Defendants’ motion to exclude Dr. Fisher’s testimony is granted regarding data based off the Bio-Trap Samplers and granted as to his conclusion that the Arbuckle-Simpson Aquifer is contaminated, but otherwise denied.

C. Dr. Kenneth J. Ede

Dr. Kenneth J. Ede is the director of the professional science masters’ program in environmental science at Oklahoma State University and additionally has worked for both the government and the private sector in forensic and general chemistry. He has been retained by

Plaintiff to offer causation conclusions that the Wynnewood Pipeline is the source of hydrocarbon contamination at the Lazy S Ranch and that the weathering of these hydrocarbons on the property are consistent with discharge from the Wynnewood Pipeline. (Doc. 130.) Defendants contend that Dr. Ede's opinions are unreliable and inadmissible because they are not based on sufficient facts or data. (Doc. 392.) As an initial consideration, Dr. Ede has the necessary qualifications to offer his conclusions. Dr. Ede has decades of experience in forensic and general chemistry, experience with gas chromatography at MET Labs, and experience as an environmental project manager for American Airlines in charge of remediating several contaminated sites.

However, apart from visiting the Lazy S Ranch, Dr. Ede relies on the sampling and gas chromatograms obtained by Dr. Fisher as the basis for his conclusion. Hence, the same limitations that apply to Dr. Fisher will apply to Dr. Ede. Given that he has no data on the Arbuckle-Simpson Aquifer, he will not be allowed to opine that it is contaminated nor can he testify about a hypothetical contamination plume due to lack of sufficient data and methods. Similarly, he will not be allowed to offer any opinions based on data obtained from Bio-Trap Samplers.⁵ As with Dr. Fisher, Dr. Ede can certainly testify about the contamination in the springs and the air samples, including offering his opinion that they are derived from the Wynnewood Pipeline, if he complies with the limits set by this court.

Regarding Dr. Ede's opinions on the weathering of the hydrocarbons, the question of weathering and the age of the hydrocarbons presents an issue of fact for the jury to decide, and Dr. Ede's experience and opinion could be helpful to the jury. However, in Dr. Ede's rebuttal report (Doc. 201) and at the *Daubert* hearing in this case, Dr. Ede offered an opinion that a single rain event at Lazy S Ranch could release up to 54 pounds of the pollutant benzene into the air from

⁵ Dr. Ede's report does not specifically state which water samples he uses as the basis of his opinion, as he simply refers to all water samples when he opines on the gas chromatograms.

Tulip Springs. This opinion is purely conjecture. Apart from Dr. Ede and others smelling what they allege to be benzene at the mouth of Tulip Springs after a rain event, there is no data to support Dr. Ede's conclusion as to a specific amount of benzene being released at Tulip Springs or on the Lazy S Ranch. He can certainly opine as to what he and others smelled at Tulip Springs, identify it as benzene, and offer an opinion as to its cause, but the specific formula offered in his rebuttal report that concludes 54 pounds of the pollutant benzene is being released is excluded as it contains too great an analytical gap. *Norris*, 397 F.3d at 886 ("when the conclusion simply does not follow from the data, a district court is free to determine that an impermissible analytical gap exists between premises and conclusion"); *Ho v. Michelin N. Am., Inc.*, 520 F. App'x 658, 666 (10th Cir. 2013) (affirming the exclusion of an expert opinion when there was no link to his underlying data); *Combs v. Shelter Mut. Ins. Co.*, No. 05-CV-474-JHP, 2007 WL 4748227, at *3 (E.D. Okla. Feb. 16, 2007) (excluding an expert opinion where the "inferences and assertions . . . are not supported by appropriate validation").

Therefore, Defendant's motion to exclude Dr. Ede's testimony is granted regarding any conclusions from data based on water samples taken using the Bio-Trap Samplers, granted as to his conclusion that the Arbuckle-Simpson Aquifer is contaminated, and granted as to his formula calculating the amount of benzene coming from Tulip Springs, but otherwise denied.

D. Dr. Kevin J. Boyle

Dr. Kevin J. Boyle is the founding director of the Blackwood Program in real estate and a professor of agricultural and applied economics at Virginia Tech University, who has been retained by Plaintiff to calculate the value of hypothetical lost water sales that Lazy S Ranch would have extracted from the Arbuckle-Simpson Aquifer. (Doc. 129.) Defendants argue that he should be excluded from testifying about the aquifer contamination because he is merely parroting the

conclusions of other experts and because his lost water sales model lacks sufficient facts and data to pass Rule 702 scrutiny. After the benefit of a hearing, the court agrees. It is true that Dr. Boyle has necessary credentials and qualifications to offer his opinions. However, the entirety of his water sales damage model is based off one datum point, namely a supposedly comparable water sale between Wingard Water Corporation and Rural Water District No. 8 of Pontotoc County (“Wingard Water Sale”). Although the Roos family allegedly purchased the property as a source of marketable potable groundwater, they have never sold any water to any municipality or other third party.

Dr. Boyle proposes to testify that leaks from the Wynnewood Pipeline have cost Plaintiff more than \$22 million in lost water sales. However, he bases this opinion on a multitude of questionable assumptions and minimal rigorous analysis. The court begins with the engineering and design flaws, and then proceeds to gaps in the economic analysis.

First, Dr. Boyle begins with an assumption that the Lazy S Ranch can produce and deliver to a hypothetical buyer the maximum volume of fresh water that may be legally produced and sold from the ranch. (Doc. 420 at 421:3–15.) This is no small assumption. Under the guidelines set by the Oklahoma Water Resources Board, the volume of water that can be extracted from the Arbuckle-Simpson aquifer is set at 0.2 acre-feet per year. (Doc. 129 at 6.) The northern part of the ranch is underlain by the Arbuckle-Simpson Aquifer; however, the Arbuckle-Simpson does not extend to the southern part of the ranch. This distinction was largely ignored by the parties at the Daubert hearing, with most of the geologic exhibits admitted into evidence indicating that the southern part of the ranch was underlain by shale formations (rather than karst). The admitted exhibits and testimony provided no indication as to whether the formations underlying the southern part of the ranch had the hydrologic and geologic properties sufficient to operate as an aquifer or

other source of salable groundwater. In that sense, Dr. Boyle was an outlier because he was a lone voice opining that the soils under the southern part of the ranch contained what he identified as a 2,067.21 acre “Unnamed Aquifer.” (*Id.* at 4. *See also* Doc. 420 at 443:23–447:17.)⁶ That position was even more remarkable because, of the \$22 million in lost water sales identified by Dr. Boyle, \$18.7 million came from water to be extracted from this Unnamed Aquifer rather than the Arbuckle-Simpson. (Doc 129 at 12.) The main driver for this difference was that Oklahoma restricts water production from the Arbuckle-Simpson to 0.2 acre-feet per year, but the Unknown Aquifer in the shale formations would be subject to the general limit under Oklahoma law of 2 acre-feet of water per year, which is the highest amount allowed under Oklahoma law for groundwater extraction in the absence of a maximum yield study. (*Id.* at 5–6.).

This is where the lack of technical rigor in Dr. Boyle’s analysis begins to have an effect. Had Dr. Boyle performed any testing on the Lazy S Ranch to validate his assumptions, then the court would have had some basis to conclude that the property could produce the volumes of water that Dr. Boyle assumes it can. But no testing was done. No one drilled any test wells to determine how much water could be produced from either the Arbuckle-Simpson or the Unnamed Aquifer. Nor was any effort made to present data from other water wells in the area that might have been arguably representative of the sort of production that could be achieved from the Lazy S Ranch. Surely there was such data, at least for such a large and well-studied source as the Arbuckle-Simpson; but Dr. Boyle presented no such evidence to the court.⁷ Moreover, with the bulk of the

⁶ At the second day of the hearing on Feb. 6, 2025, Plaintiff’s counsel argued that Dr. Geoffrey Canty, an interested party, would testify as to the existence and properties of the Unnamed Aquifer. (Doc. 420 at 445:19–446:11.) However, the court heard no testimony at the hearing from Dr. Canty, Dr. Canty has not filed any Rule 26 report in the present case, and Dr. Boyle did not rely on Dr. Canty’s deposition testimony nor have any discussion with him in formulating his conclusions. (*Id.* at 446:15–447:17; 449:6-16.)

⁷ Dr. Fisher’s report presents some general characteristics of 19 groundwater wells on the Arbuckle-Simpson within 6.5 miles of the property, including stating “recorded water yields range widely between < 1.0 to 50 gallons per minute

damages for lost water sales coming from the so-called Unnamed Aquifer, testing of that formation was even more important. And while it is not beyond belief that groundwater might be producible in some volumes from some parts of the southern portion of the ranch, it was Plaintiff's burden to prove that. If Plaintiff did not want to drill test wells to prove up that theory, it should have at least pointed to some scientific studies, books, papers, or similar sources that documented the presence of producible groundwater from this Unnamed Aquifer, as well as the rates at which it might reasonably be produced. Plaintiff did neither, nor did it offer the court anything other than the *ipse dixit* of Dr. Boyle on this critical topic. *Smith v. Sears Roebuck & Co.*, 232 F. App'x 780, 783 (10th Cir. 2007) (citing *Gen. Elec. v. Joiner*, 522 U.S. 136, 146 (1997)) (holding an expert's conclusion must be based on sufficient facts and data and cannot be "connected to the existing data only by the *ipse dixit* of the expert").

Moreover, evidence regarding the potential productivity of water wells on the ranch is indispensable to the related task of determining the capital and operating costs for the wells that Dr. Boyle assumed in his analysis. Each water well comes at a capital cost for its drilling, completion, and equipping; and each such well comes with ongoing operating costs to pay for standard equipment maintenance as well as electricity to pump the wells. Productivity data for each of the two alleged aquifers would aid in determining whether the Lazy S Ranch would need

(gpm) with an average water yield of 16 gpm." (Doc. 131 at 21.) He then contends that given the karst nature of the Lazy S Ranch above the Arbuckle-Simpson "wells completed [on the property] could penetrate a significant thickness of the karst aquifer and have produce [sic] high water yields" based on a report by Roy W. Fairchild et al., *Hydrology of the Arbuckle Mountains Area, South-Central Oklahoma*, OKLA. GEOLOGICAL SURV., CIRCULAR 91 (1990), <http://ogs.ou.edu/docs/circulars/C91.pdf>. (*Id.*) However, none of the data which Dr. Fisher reports regarding water production at the property is used by Dr. Boyle in his model, and Dr. Fisher provides no additional data on the Unnamed Aquifer. While Dr. Boyle could have plausibly relied on Dr. Fisher's report for water production levels extracted from the Arbuckle-Simpson, he assumed that the ranch could extract 818 acre-feet per year from the Arbuckle-Simpson without any reference to Dr. Fisher's report, and provided no justification for his assumption that the Unnamed Aquifer could produce 4,116 acre-feet per year. (Doc. 129 at 6.) Although an extraction of 818 acre-feet of water per year from the Arbuckle-Simpson might be plausible given Dr. Fisher's analysis, the lack of Dr. Boyle's reference to this data combined with other issues highlighted below leads the court to conclude that Dr. Boyle's testimony lacks the sufficient basis to pass muster under Rule 702.

two wells or two hundred wells to achieve the maximum volume of water production under Oklahoma law. The economic realities of water well production costs necessarily shape Plaintiff's damages in this case, and the damages could be affected greatly by the answer to such questions. *See, e.g., Anderson Living Tr. v. Energen Res. Corp.*, 886 F.3d 826, 838 n.14 (10th Cir. 2018) (noting that in oil and gas drilling "production costs . . . must generally be borne by the well operator"). Instead, Dr. Boyle chose to ignore these costs. He provided no evidence of the productivity of the aquifers, and did not even consider the costs to drill, complete, operate, and maintain however many wells would be required to achieve his assumed production rate. In a sense, he negated the importance of knowing how much water one well could produce from the aquifers on the property because his model assumed a fixed, zero cost for extracting the groundwater to simplify the economic analysis. He justified this assumption by also assuming a municipal buyer of the water would pay for the drilling and maintenance of any well drilled on the property. (Doc. 420 at 466:18–470:8.) Unfortunately, that approach is divorced from reality. Indeed, the Wingard Water Sale contract that Dr. Boyle relies upon says nothing about the cost of drilling, maintenance, and operation of the water wells relevant to that contract. (Doc. 128 at 15–16.) Instead, the contract says that the property owner maintains ownership of the wells and that the buyer is responsible for infrastructure and water meters downstream, but it is silent as to the costs of the wells themselves. Moreover, there was no testimony to establish any industry custom or practice that a buyer frequently or always pays the costs associated with drilling, maintaining, and operating water wells in a transaction like that posited by Dr. Boyle. Accordingly, Dr. Boyle's assumption that the buyer will bear all costs lacks any evidentiary basis and is accordingly rejected.

Second, Dr. Boyle failed to analyze the market for his assumed potable water production from the property. As an initial matter, he assumed that some unknown purchaser in or around

Carter County where the property is located would buy the maximum volume of water that Lazy S Ranch could produce under the law. (Doc. 129 at 8.) However, Dr. Boyle failed to identify who that purchaser might be. At the hearing, he testified that the Roos family had been in conversations to potentially sell water to either the town of Ardmore or the town of Ada (Doc. 420 at 435:17-436:9), and he also testified that, to his understanding, there is an increasing number of buyers in the region. (Doc. 420 at 472:20–475:23.) However, Dr. Boyle never talked to any of these entities nor made any effort to explore whether they had any need for the additional volumes that Lazy S Ranch hoped to produce.⁸ It is worth noting that the Lazy S Ranch is situated in a fairly rural area with no indication of a robust potable water market. Indeed, there is no way of knowing whether such sales would have ever occurred. Yet, Dr. Boyle assumes that, but for the alleged leak from the Wynnewood Pipeline, a local municipality or other buyer would buy the entire theoretical production stream of potable water from the property.

And that brings us to the next great analytical leap in Dr. Boyle’s market analysis. Dr. Boyle not only assumes that a theoretical buyer would purchase all the water that Lazy S could produce absent a pipeline leak, but also assumes that the same theoretical buyer would refuse to purchase any water if the pipeline was leaking. While that assumption may not be shocking in the abstract, it strains credulity when one notes that the water samples taken from the ranch were all either below the laboratory’s reporting limits for the contaminants of concern or generally orders of magnitude below the limits set for drinking water contaminants by the Oklahoma Corporation Commission (OCC), the Oklahoma Department of Environmental Quality (ODEQ), the Oklahoma

⁸ Even assuming that there is an increasing market for potable water in the area around the property, there is no evidence in the record that current demand for water is not being met. Accordingly, any water sales from the Lazy S Ranch would potentially displace other water sales from other sources. Dr. Boyle makes no effort to address this market reality or assess its impact on the price that Lazy S Ranch would have to charge to draw those hypothetical purchasers away from their current source of water supply.

Water Resources Board (OWRB), and the United States Environmental Protection Agency (EPA). *See Lazy S Ranch Props., LLC*, 92 F.4th at 1208–09 (Philips, J., dissenting) (providing three tables showing the maximum concentration of benzene, toluene, ethylbenzene, xylenes, and total petroleum hydrocarbons are either below the laboratory’s reporting limits or well under (generally by orders of magnitude) the applicable regulatory limits). Moreover, it bears repeating once again that no samples were taken from either the Arbuckle-Simpson or the Unnamed Aquifer. Thus, Dr. Boyle’s opinion assumes that a buyer would reject water that, according to the testing we have on the record, is well within applicable drinking water standards solely on the basis that it is produced from an allegedly contaminated aquifer when there is no evidence that the aquifer is actually contaminated. *See supra* III.B, and III.C (prohibiting Dr. Fisher and Dr. Ede from testifying about aquifer contamination due to lack of evidence to support that opinion).

Third, Dr. Boyle did not conduct a market analysis as to what price potable water might fetch except for his reliance on a single datum point from a 2015 Wingard Water Sale in Pontotoc County, Oklahoma. Although this Wingard Water Sale may provide relevant information, using this single datum point alone to project water sales for a property that has never sold a single drop of water is inherently speculative, and does not pass the threshold for reliability under Rule 702. An expert’s conclusion must be based on sufficient facts and data and cannot be “connected to the existing data only by the *ipse dixit* of the expert.” *Smith*, 232 F. App’x at 783.

Even accepting this Wingard Water Sale contract as a valid basis for calculating lost water sales at the Lazy S Ranch, the Wingard Water Sale contract does not guarantee that the Wingard Water Corporation will be able to sell the maximum volume of water permitted by law. Instead, paragraph eleven of the agreement merely provides Rural Water District No. 8 of Pontotoc County the right of first refusal to purchase water. (Doc. 129 at 16.) Thus, there was no guarantee that

Wingard was going to sell, or that the water district was going to buy, *any* water under the Wingard Water Sale contract, much less the maximum volume that property could lawfully produce. On top of that, the Lazy S Ranch withdrew its application for a water sale permit, and that is an important factual difference between the ability of Wingard Water Corporation to sell its water and the ability of Lazy S Ranch to sell its water. Thus, even construing this singular water sales datum point as charitably as possible does not show that Lazy S Ranch has suffered damages for the loss of the maximum volume of water sales permissible under the law.

In sum, Dr. Boyle's opinion that the alleged leak from the Wynnewood Pipeline has cost Plaintiff over \$22 million in lost water sales is based on one faulty assumption after another. Rather than render an opinion based on any sort of rigorous analysis, this opinion relies on conjecture, speculation, and other opinions already excluded hereunder, including specifically that any aquifer underlying the ranch is contaminated. Given the above conclusions, Dr. Boyle's opinion is unreliable, almost totally lacking in supporting facts and data, and unhelpful to the jury. Indeed, the jury does not need an expert to help it speculate on damages. Therefore, Defendants' motion to exclude the testimony of Dr. Kevin J. Boyle is granted.

E. Dr. Tamzen Macbeth

Dr. Tamzen Macbeth has been retained by Plaintiffs to provide a damages calculation for the investigation and cleanup costs regarding the allegedly contaminated soil, groundwater, springs, and cattle supply wells, in addition to the cost of pipeline replacement. (Doc. 132.) Defendants contend that Dr. Macbeth's opinion is imprecise in its conclusions and that her damages model is exorbitant and conceptual. (Doc. 391.)

As with the other experts, the court concludes as a threshold matter that Dr. Macbeth is qualified to offer her opinions. She obtained her doctorate in Civil and Environmental Engineering

from the University of Idaho, and she has published numerous peer-reviewed papers in the field of contaminated site remediation along with dozens of conference presentations. In her current role as senior vice president and international remediation practice leader at CDM Smith, she has “served as the principal investigator, manager, or lead engineer for over 100 government, private and international contaminated sites undergoing cleanup of soils, sediments, surface water or groundwater.” (Doc. 132 at 9.) This education and experience provides her with sufficient experience to offer her conclusions on remediation at the Lazy S Ranch.

Before proceeding to the rest of the analysis, the court pauses to note that Dr. Macbeth was a good witness. She presented as competent, credible, and likeable. The critique of her conclusions that follows in this order is not so much a disapproval of her work and methods, but rather it is the natural consequence of the lack of investigation that preceded her work. As previously noted, Plaintiff’s investigation of the scope of contamination on the ranch has left much to be desired. Dr. MacBeth was forced to work with that limited data set and make a host of assumptions about the scope of the project. As explained, below, that is not unusual at the early stages of a remediation project. However, it becomes problematic when a plaintiff wants to stop there and take the evidence from the incipient stage of a pollution investigation and then use that limited evidence as the primary basis for meeting its burden of proof in a civil damages case. That is the essence of the problem here.

Hence, the court is concerned with the inherently speculative nature of Dr. Macbeth’s damages model. Dr. Macbeth’s expert report states, and she confirmed with her testimony at the hearing, that her estimates for the costs to remediate Lazy S Ranch:

are considered order of magnitude and are regarded as Class 5 (Screening or Concept Study) with an accuracy of -50%/+100% of actual cost according to the ASTM International Standard Classification for Cost Estimate Classification System (Designation E 2516-11 [2019]). The information presented in these cost

estimates is based on the best available information regarding the *anticipated scope* of the cleanup plan.

(Doc. 132 at 8-9) (emphasis added). She further describes that:

[t]he levels of detail employed in making these estimates are *conceptual* but are considered appropriate as *a conceptual cleanup cost*; however, *they are not meant to be design-level estimates used for budgeting purposes*.

(*Id.* at 24) (emphasis added). She further elaborates on the conceptual nature of her cost estimates as follows:

Conceptual cost estimates are typically completed with minimal scope definition. The cost estimate was prepared for the cleanup approach at the site and to provide an order of magnitude bracketing of budgetary costs. Costs presented for the conceptual cleanup approach is considered an order of magnitude and are regarded as Class 5 (Screening or Concept Study) with an accuracy range of -50%/+100% of actual cost according to the ASTM International Standard Classification for Cost Estimate Classification System (Designation E 2516-11 [2019]). The information presented in these cost estimates is based on the best available information regarding the anticipated scope of the conceptual cleanup approach. Changes in the cost elements are likely to occur because of new information and data collected during a pre-design investigation.

(*Id.* at 26) (emphasis added).

ASTM International Standard Classification for Cost Estimate Classification System (Designation E 2516-11) (“ASTM E 2516-11”) purports to provide “a generic classification system for cost estimates and provides guidelines for applying the classification to cost estimates.” ASTM E 2516-11 § 1.1. This standard establishes five classes of cost estimates based primarily on the degree of project definition. *Id.* § 5.1, 5.3. “A Class 5 estimate is based upon the lowest degree of project definition, and a Class 1 estimate is closest to full project definition and maturity.” *Id.* § 5.4. The standard is not industry specific, but rather “may be applied generically to just about any particular industry.” *Id.* § 5.6.

Consistent with Dr. Macbeth’s expert report and her explanation at the hearing, a Class 5 estimate is generally considered useful for “screening or feasibility” and is utilized where the

degree of project definition is only around 0% to 2% complete. *Id.* at Table 1; *see also* Doc. 420 at 510:5–511:25. The accuracy of the costs projected in a Class 5 estimate can vary considerably, but can be as broad as -50% to +100%. ASTM E 2516-11 at Table X1.1, Doc. 420 at 505:8–506:15. Under ASTM E 2516-11,

estimate accuracy will generally be correlated with estimate classification (and therefore the degree of project definition), all else being equal. However, specific accuracy ranges will typically vary by industry. Also, the accuracy of any given estimate is not fixed or determined by its classification category. Significant variations in accuracy from estimate to estimate are possible if any of the determinants of accuracy, such as differing technological maturity, quality of reference cost data, quality of the estimating process, and skill and knowledge of the estimator vary. Accuracy is also not necessarily determined by the methodology used or the effort expended. Estimate accuracy must be evaluated on an estimate-by-estimate basis, usually in conjunction with some form of risk analysis process.

ASTM E 2516-11 § 8.5.4. In other words, while the classification of an estimate generally defines the accuracy of the costs included therein, the standard is not so rigid as to preclude higher or lower degrees of accuracy. Instead, the accuracy of the estimate must be evaluated on a case-by-case basis. Dr. Macbeth did that here, and in doing so she concluded that the accuracy of her estimate was consistent with that of a generic Class 5 estimate, which is -50%/+100%. (Doc. 132 at 26.) Finally, consistent with Dr. Macbeth’s report and her testimony at the hearing, ASTM E 2516-11 indicates that the degree of project definition and the resulting accuracy of the cost estimates are generally inadequate for budgeting purposes until the overall estimate reaches Class 3 (project definition 10% to 40%), and would not reach a level of accuracy sufficient for bidding purposes until the estimate advances to Class 2 (project definition 30% to 70%). *Id.* at Table 1.

In civil lawsuits, Oklahoma uses “greater weight of the evidence” as the standard of proof for juries rendering a verdict and awarding damages. Vernon’s Okla. Forms 2d, OUJI-CIV 3.1 (2d ed.). *See also Henderson v. State*, 568 P.2d 297, 298 (Okla. Crim. App. 1982) (“A preponderance of the evidence has been defined by this Court to mean simply the greater weight of evidence”);

Florafax Int'l, Inc. v. GTE Mkt. Res., Inc., 933 P.2d 282, 287 (Okla. 1997) (“it is not an appellate court's function to decide where the preponderance of the evidence lies—that job in our system of justice has been reposed in the jury”). Nevertheless, “[d]amages that are uncertain, contingent, or speculative in their nature cannot be made the basis of a recovery.” 25 C.J.S. Damages § 34. *See also Great W. Motor Lines, Inc. v. Cozard*, 417 P.2d 575, 578 (Okla. 1966) (“Damages, to be recoverable, must be susceptible [sic] of ascertainment in some manner other than by mere speculation, conjecture or surmise, and by reference to some definite standard”). This does not mean that any uncertainty prevents recovery. The Oklahoma Supreme Court has held that after damages have been established “uncertainty as to the exact amount of damages will not preclude the right of recovery.” *Larrance Tank Corp. v. Burroughs*, 476 P.2d 346, 350 (Okla. 1970). However, the burden is on Plaintiff to “furnish evidence of sufficient facts and circumstances to permit the fact-finder to make at least an intelligent and probable estimate of the damages sustained.” 25A C.J.S. Damages § 292. In Oklahoma, evidence “is sufficient if [it] shows the extent of damage by just and reasonable inference.” *Florafax Int'l, Inc. v. GTE Mkt. Res., Inc.*, 933 P.2d 282, 296 (Okla. 1997).

In this case, Dr. Macbeth’s damages estimate is too speculative for a jury to award damages. Although she arrives at her estimate based off her prior experience and expertise, the characteristics of a Class 5 estimate (namely that Class 5 estimates are not used for budgeting purposes, the estimates are given with only 0–2% project definition, and Class 5 estimates have an accuracy range of - 50%/+100% of actual cost) renders a Class 5 estimate inadequate to establish a probable estimate of the damages sustained by the Lazy S Ranch. Dr. Macbeth’s proposed model with 150% variation in total remediation cost could result in actual damages of as low as \$21,646,000 and as high as \$86,584,000, which is an extremely large variation in cost to present

to the jury for their consideration. If the court allowed the jury to set damages within this wide range, it is quite possible that the damages amount decided by the jury could give Plaintiffs either an undue windfall or under compensation. *See, e.g., Occidental Petroleum Corp. v. Wells Fargo Bank, N.A.*, 117 F.4th 628, 641 (5th Cir. 2024).

Moreover, awarding Plaintiff damages in this litigation does not guarantee that this alleged contamination is ever investigated or addressed. Rather than providing a definitive damages number, Dr. Macbeth testified that her current estimate would serve only as a basis for a “predesign investigation.” After this investigation, she would “revise[] [the] quantities and assessments, [and] adjust the remediation approach” to allow accurate construction bids. (Doc. 420 at 538:22–539:25.) However, there is no guarantee that a judgment in favor of Plaintiff will ever result in this predesign investigation or adjustment to the remediation process after the conclusion of this litigation. It is quite possible that “should the Plaintiffs prevail on their current damages theory, the remedy thus obtained would leave the existing contamination in place . . . untreated and undisturbed.” *New Mexico v. Gen. Elec. Co.*, 335 F. Supp. 2d 1185, 1259 (D.N.M. 2004). When Dr. Macbeth presented her conclusions at the *Daubert* hearing, she appeared visibly stunned when she learned that any money awarded to remediate the alleged contamination on the property would not be held in trust to restore the property but would instead be paid directly to Plaintiff with no guarantee of any of that money being spent on her proposed remediation.

It is true that “[i]n tort cases, a carefully considered estimate leads to a more just result than denying all recovery to the injured victim.” 25 C.J.S. Damages § 37. In some cases where the initial estimate is supported by multiple appraisers, a claim for damages based off a Class 5 estimate may lead to a reasonable result. *See, e.g., Port of Houston Auth. of Harris Cnty. Texas v. Louis Dreyfus Co. Houston Exp. Elevator, LLC*, No. CV H-19-746, 2022 WL 3446129, at *7 (S.D.

Tex. Aug. 17, 2022) (holding that a jury award based off a Class 5 estimate range was not unreasonable). However, a damages award cannot be based on estimates that are simply guesstimates. *Massey v. Gulf Oil Corp.*, 508 F.2d 92, 97 (5th Cir. 1975) (affirming an order for new trial where damages were based on a percentage of recovery factor which was in early stages and which an engineer said was “pretty much of a guesstimate [sic]”). In this case, Dr. Macbeth concedes in her report that her damages are for a “conceptual cleanup plan” and her estimates of costs for each component are “considered order of magnitude.” (Doc. 132 at 8.) Thus, the number Dr. Macbeth suggests cannot provide the jury with a reasonably accurate figure for remediation costs without further predesign investigation to define the specific costs of the project. This alone is sufficient to preclude her testimony as to the amounts of damages without regard to the propriety of other underlying assumptions in her damages model. Moreover, even if Dr. Macbeth’s Class 5 estimate (with its inherent uncertainty surrounding the accuracy as to the amount of damages) was sufficient for a jury to award damages, the court additionally concludes that the multitude of unsupported assumptions underlying that estimate, when combined with the uncertainty of the Class 5 estimate, fails to satisfy the requirements of *Daubert* and Rule 702 which would permit Dr. Macbeth’s testimony on damages in this case.

As shown by the uncontested facts in this case, and as acknowledged by Dr. Macbeth in her report, Plaintiff has failed to identify any specific leaks on the Wynnewood Pipeline. Instead, the Tenth Circuit remanded this case for trial based on circumstantial evidence of gasoline and diesel in Tulip Springs, Buzzard Springs, and another unnamed spring designated SP-2 that points toward the Wynnewood Pipeline as the possible source. In lieu of actual evidence regarding the existence, location, and discharge rate at any known leak sites on the pipeline, Dr. Macbeth assumed the existence of four leaks at unknown locations. (Doc. 132 at 33.) Moreover, she

assumed that each of these four leaks discharged pipeline liquids in volumes “at least equal to or more than” the amount discharged in an unrelated leak that occurred on April 28, 2018, on a property located south of the Lazy S Ranch. (*Id.* at 28–29.) From those assumptions, Dr. Macbeth then assumed that the volume of contaminated soil requiring remediation at each of the assumed leak locations was at least equal to or more than the volume of soil contaminated by the 2018 release.

While the first of these assumptions might be reasonable in isolation given the circumstantial evidence in this case, the other two – that there are four leaks on the Lazy S Ranch, and that each of them leaked at least as much as the 2018 leak – are nothing but rank speculation. Based on these two later assumptions, Dr. Macbeth estimates that it will cost \$2,772,000 to fully remediate the shallow soil contamination from the four assumed leak sites, mostly through excavating and removing the contaminated soil. (*Id.* at 41, 52.) Additionally, Dr. Macbeth assumes that at two of the leak sites the petroleum products that leaked from the pipeline have penetrated deeper than can be remediated by soil excavation (*Id.* at 33–36), and that this soil would have to be remediated by a combination of soil vapor extraction and multi-phase extraction with a capital cost estimate of \$669,000 and ongoing operation and maintenance costs of \$214,000 per year for five years. (*Id.* at 41, 56.) All combined, Dr. Macbeth estimates the total undiscounted cost for soil remediation based on these assumptions at \$4,618,000 based on nothing more than speculation and assumptions. (*Id.* at 7.)

Turning to the groundwater cleanup, Dr. Macbeth relied largely on the opinions of Dr. Fisher that leaks from the Wynnewood Pipeline have resulted in two plumes of contamination within the Arbuckle-Simpson Aquifer – one located in the Cool Creek Basin karst aquifer measuring 645 feet long and 200 feet wide, and one in the South Slope Basin karst aquifer

measuring 245 feet long and 125 feet wide. (*Id.* at 28.) However, as noted earlier in this order, Dr. Fisher’s conclusions regarding a contamination plume within the Arbuckle-Simpson Aquifer are based on unsupported assumptions that have not been validated by any actual testing to confirm that the Arbuckle-Simpson contains any contamination, much less to the extent and in the locations suggested by him. Based on Dr. Fisher’s assumptions, Dr. Macbeth selected a groundwater pump-and-treat remediation system that she further assumed would need to operate for 30 years to restore the Arbuckle-Simpson Aquifer. (*Id.* at 36–38.) This system would consist of a total of five groundwater extraction wells and five groundwater reinjection wells between the two hypothetical plumes (*Id.* at 34–35), along with supporting equipment, with a total capital cost of \$1,969,000, along with ongoing operation and maintenance costs of \$189,000 per year over the 30 years of remediation. (*Id.* at 54, 57.) Dr. Macbeth estimates the total undiscounted cost for groundwater remediation based on these assumptions at \$11,555,000. (*Id.* at 7.)

During the hearing, the court questioned Dr. Macbeth about some of her assumptions related to this groundwater treatment remedy. The court noted that Dr. Macbeth’s report assumes a “continuous source” of contamination over the life of the project. (Doc. 420 at 537:11–538:21.) Further noting that one of the first steps in the suggested remediation plan was to replace the allegedly leaking pipeline, the court questioned the propriety of the assumption that contaminants would continue to feed the alleged plumes of groundwater contamination. (*Id.* at 549:12–550:13.) Dr. Macbeth indicated that her analysis assumed continued contamination, even after removal of the pipeline, because contaminants might leach from the overlying soils and rock or otherwise enter the aquifer, even if the pipeline were replaced. When questioned about the duration of the pump-and-treat remedy, she indicated that 30 years was simply the EPA’s default number for these types of projects, noting further however, that “if those sources [of contamination] are remediated

and controlled, that drastically affects the timeline or time frame that you could expect the groundwater cleanup to also occur.” (Doc. 420 at 550:21-24.) Continuing, Dr. Macbeth noted:

if those sources are successfully identified, and . . . those sources are removed, then the restoration time frame for the groundwater system is going to be driven by how long it takes for whatever is already in the plume and kind of out into the formation to attenuate and the pump and treat system to remove it down to the restoration levels.

(*Id.* at 551:9-17.)

Following up on that notion, the court observed that, according to Dr. Fisher, the plumes that he modeled in the Arbuckle-Simpson were already at steady state, meaning that they were not growing. (*Id.* at 554:2–25.) Even if additional contaminants are leaking from the pipeline and reaching the aquifer, the plumes are not growing because of natural attenuation, which seems to indicate that natural processes of decay and dilution are already limiting the plumes to their current size. Moreover, the largest of the plumes was estimated at only 645 in length – less than a quarter of a mile from the pipeline on ranch that spans over 6,000 acres. In response to the court’s questions, Dr. Macbeth acknowledged:

If the sources can be identified and treatment is sufficient then I think the contaminate plume attenuation could be relied on and often is at sites, you know, to address or mitigate groundwater impacts. The issue that we have now is that the sources are not abated and so in this remediation plan estimate we are being conservative, such that it is comprehensive in -- in representing what that risk and liability is without controlling sources.

(*Id.* at 555:5-13.) From this statement, it seems apparent that if natural attenuation is already limiting the largest of the plumes to 645 feet, then replacing the pipeline or otherwise repairing the leaks would result in an even smaller plume contained by natural attenuation, thereby casting further doubt on the propriety of a 30-year, \$11 million dollar pump-and-treat remedy. In any event, having already ruled that Dr. Fisher and the other witnesses will not be permitted to testify on the aquifer contamination, that leaves no evidentiary basis for Dr. Macbeth’s testimony on the

need for a pump-and-treat groundwater remediation plan since she relies on the testimony of those other experts to establish the existence of the groundwater contamination plumes in the first instance.

Moving to the last two remaining categories of damages in Dr. Macbeth's report, Dr. Macbeth contends that there are seven contaminated springs on the property and four contaminated cattle supply wells based on Dr. Fisher's report. (Doc. 132 at 27–28.) The seven springs are comprised of Tulip Springs, Buzzard Springs, and five other unnamed springs (designated SP-1, SP-2, SP-5, SP-6, and SP-7). (*Id.* at 36.) It is important to note that Dr. Fisher only reports contamination in Tulip Spring, Buzzard Spring, and SP-2. However, Dr. Macbeth "assumes that springs SP-1, SP-5, SP-6, and SP-7 are also contaminated because they are all within the same range of contaminant distribution among the springs." (*Id.* at 31.) As a result of this assumption, Dr. Macbeth calculates the capture and treatment cost for the seven contaminated springs to be \$4,090,000, along with ongoing operation and maintenance costs of \$135,000 per year over the 30 years of remediation. (*Id.* at 53, 55.) This process would involve the creation of three separate capture and treating systems. Each system would require a holding pond with granular activated carbon (GAC) to treat the water that each spring discharges. This water would then be "discharged to the nearest creek or used to supplement the Ranch's water supply." (*Id.* at 37.) Dr. Macbeth estimates the total cost for the capture and treatment of contaminated springs based on these assumptions at \$10,937,000. (*Id.* at 41.)

Similarly, Dr. Macbeth assumes that four cattle supply wells (SOW-1, SOW-2, SOW-3, and SOW-4) are contaminated because "the [wells'] proximity to the pipeline and the same infiltrating precipitation that supplies water to the springs is the source of groundwater recharge to the Arbuckle-Simpson Aquifer and will have the same contamination." (*Id.* at 31.) Dr. Macbeth

proposes installing point-of-use GAC adsorption treatment system at each of the wellheads to prevent any contamination from getting out of the wells. She calculates the cost of modifying and securing the current well heads as \$132,000, along with ongoing operation and maintenance costs of \$139,000 per year over the 30 years of remediation. (*Id.* at 53, 56.). Dr. Macbeth estimates the total cost for modifying the existing cattle supply wells to treat and discharge water pumped from the wells at \$7,182,000. (*Id.* at 41.)

Although Dr. Macbeth proposes total damages of \$18,199,000 to remediate contamination in seven springs and four cattle supply wells on the ranch, only three of the springs (Tulip, Buzzard, and SP-2) were tested to validate whether they contained any contamination. Additionally, none of the cattle supply wells were tested, and cattle on the property regularly drink water from these wells with no issue. Dr. Macbeth admitted as such at the hearing. (Doc. 420 at 522:21–526:19). Dr. Fisher’s report, which serves as the basis for Dr. Macbeth’s damages model, states that springs SP-1, SP-5, SP-6, and SP-7 “*could* be contaminated” since there were hydrocarbons recovered from Tulip Springs, Buzzard Spring and SP-2. (Doc. 131 at 44) (emphasis added). Moreover, when referring to the cattle water supply wells, Dr. Fisher opines that they are “*considered* to be *potentially* contaminated by refined petroleum product hydrocarbons.” (*Id.*) (emphasis added). This sort of untested, hypothetical contamination is not a sufficient evidentiary foundation on which to base a claim for over \$18 million in damages. Even if the testing was done at each of these sites, the court anticipates that the amount of contamination discovered, if at all, would be like the other water samples taken at the ranch, which had contamination levels either below the laboratory’s reporting limits for the contaminants of concern or generally orders of magnitude below the limits set for drinking water contaminants. Thus, Dr. Macbeth lacks a sufficient factual basis to opine on the damages suffered by Lazy S Ranch as a result of the alleged seepage from

the Wynnewood Pipeline.

Aside from the foregoing concerns regarding both the fundamental accuracy of the damages estimates in Dr. Macbeth's Class 5 feasibility estimate and the various assumptions Dr. Macbeth makes that compound the risks of speculative damage awards by a jury, the court notes that some of the damages sought by Plaintiff in this case are for remediation activities that Plaintiff cannot legally perform. The clearest example is Plaintiff's request for \$6 million in damages to replace the Wynnewood Pipeline. Dr. Macbeth includes that figure in her report as part of her damages model to remediate the Lazy S. Ranch. (Doc. 132 at 7.) This figure purports to be based on Defendant's own estimates to replace a different portion of the pipeline that is not located on the Lazy S. Ranch. However, that pipeline belongs to Defendants. Plaintiff cannot lawfully undertake to replace that pipeline because it is not within the Plaintiff's control; nevertheless, Plaintiff asks for \$6 million in damages for the cost of replacing the line. Additionally, Plaintiff asks the court to have the jury order Defendants to replace the line in the pretrial order. (Doc. 230 at 6.)

The court raised this concern at the hearing, noting that the pretrial order did not appear to preserve any requests for injunctive relief, and questioning how it is that Plaintiff expects to replace the line using the \$6 million in damages while also requesting that Defendants be compelled to replace the line. (Doc. 420 at 556:9–557:22, 562:8–24.) However, upon further review of the pretrial order after the *Daubert* hearing, the court noted that Plaintiff did essentially include a request for the court to abate the nuisance if Plaintiff prevails on its nuisance claim. (Doc. 417; 421 at 6:19-11:13; 230 at 6.) As a practical matter, injunctive relief is the proper course of action

for most of the relief Plaintiff requests in this case.⁹ When dealing with nuisance claims, a finding of either a private or public nuisance gives a court authority to exercise equitable powers to abate the nuisance. Okla. Stat. tit. 50, §§ 6, 8, 11, 13. *See also Fischer v. Atl. Richfield Co.*, 774 F. Supp. 616, 619 (W.D. Okla. 1989) (citing to *Sheridan Oil Co. v. Wall*, 103 P.2d 507, 510 (Okla. 1940)) (holding a court can either issue a mandatory injunction requiring the defendant to abate the nuisance or Plaintiff can be awarded the costs of abatement). At this point in the litigation, the parties have not involved any state or federal agencies to aid in investigating the alleged spill or guiding any potential remediation, so equitable relief would not interfere with ongoing regulatory or agency actions. *Cf. B.H. v. Gold Fields Mining Corp.*, 506 F. Supp. 2d 792 (N.D. Okla. 2007) (staying equitable relief where the EPA has already begun remediation). If Plaintiff prevails on a nuisance claim, the court will exercise equitable powers to oversee the work that Plaintiff should have done in preparing this case for trial. The court will direct Defendants, as the court determines appropriate under the law, to investigate, test, repair, or replace the pipeline. Similarly, the court may direct Defendants to test the aquifer, springs, wells, and soils potentially affected by any leaks identified from the investigation of the pipeline itself, and remediate any contamination revealed in those investigations. Such actions will be undertaken by Defendants at Defendants' own costs, whatever those may be. If soil, springs, and/or groundwater remediation is warranted, these actions can be performed once actual investigation confirms the location and size of any actual contamination. This course of action ensures that any leak found on the property is remedied,

⁹ As noted by the court elsewhere in this case, the most efficient approach might have been for Plaintiff to involve the EPA or corresponding state environmental authorities. If the contamination on the ranch is as obvious and significant as Plaintiff contends, those entities might have had the willingness and the funding to do the investigation that Plaintiff failed to perform. That might have achieved a timely resolution to any actual leakage, cleanup of any resulting contamination, and handed Plaintiff the evidentiary basis to pursue any remaining damages claims against Defendants largely free of charge. Instead, Plaintiff chose to go it alone and focus mostly on damages instead of equitable relief; now, six years into this case, we are finally going to trial, but with a much higher focus on equitable relief than money damages.

rather than simply providing Plaintiff monetary damages based on rank speculation necessitated by the lack of investigation performed so far and with no guarantee that Plaintiff will actually use any damages awarded to perform the suggested remediation. If Plaintiff prevails on its claims, it may also be entitled to damages such as diminution in property value and loss of use and enjoyment, as well as any other monetary and non-monetary relief preserved in the pretrial order. However, as explained above, Dr. MacBeth's opinions regarding damages based on the costs to remediate alleged contamination on the Lazy S Ranch are not based on sufficient facts and data and are too speculative at this stage of the investigation to go to a jury. Accordingly, she will not be permitted to testify as to those opinions at trial.

Beyond concerns about Dr. Macbeth's damages model, the court also must take the instructions from the Tenth Circuit into consideration. The Tenth Circuit, in reviewing the undersigned's previous grant of summary judgment, ordered this court to hold a trial on the issues of private nuisance under Okla. Stat. tit. 50, § 1, et seq., and public nuisance under Okla. Stat. tit. 27A, §§ 2-6-105(A) and 2-1-102(12). *Lazy S Ranch Props., LLC*, 92 F.4th at 1199–1201. *See also Nichols v. Mid-Continent Pipe Line Co.*, 933 P.2d 272, 276 (Okla. 1996) (recognizing that statutory nuisance claim incorporates, but does not abrogate, common law concepts of private or public nuisance). As stated above, in consideration of the court's concerns with Dr. Macbeth's damages model and the Tenth Circuit mandate, the court found that it retained the equitable power in this case to abate a nuisance. (Docs. 417, 421 at 6:19-11:13.) This means that should a jury find that Defendants' pipeline constitutes a nuisance, then the court will exercise its equitable authority to oversee its abatement. Thus, Dr. Macbeth's damages model no longer applies, as any costs in the abatement process will be borne by Defendants, regardless of amounts.

Therefore, Defendants' motion to exclude Dr. Macbeth's damages model is granted.

However, the process of a court exercising its equitable authority involves discerning factual issues that are complex. If the court is required to oversee an abatement process, it may need to rely on experts such as Dr. Macbeth to craft an appropriate plan for abatement. *See, e.g., Gold Fields Mining Corp.*, 506 F. Supp. 2d at 803. Thus, Dr. Macbeth will be allowed to testify, at the appropriate time, as to the process and procedures for abating a nuisance such as the one at issue in this case, even though she will not be allowed to testify as to her proposed damages model. The parties should consider whether it makes sense to have her do that at trial or at a post-trial hearing, assuming the jury returns a verdict that authorizes abatement. The latter approach may be more efficient, sparing the jury unnecessary testimony; however, if the jury returns a verdict that would authorize abatement, the court intends to proceed quickly to at least the first steps of a proper investigation, including any actions necessary to mitigate the risks of further leakage from the Wynnewood Pipeline until a proper inspection of that line can be performed.

IV. Conclusion

Defendants' motion to disqualify Kiefer and Associates (Doc. 386, 395) is DENIED. Defendants' motion to exclude testimony from Trae J. Miller, III (Doc. 390) is GRANTED IN PART and DENIED IN PART. Defendants' motion to exclude testimony from Dr. J. Berton Fisher (Doc. 393) is GRANTED IN PART and DENIED IN PART. Defendants' motion to exclude testimony from Dr. Kenneth Ede (Doc. 392) is GRANTED IN PART and DENIED IN PART. Defendants' motion to exclude testimony from Dr. Kevin J. Boyle (Doc. 389) is GRANTED. Defendants' motion to exclude testimony from Dr. Tamzen Macbeth (Doc. 391) is GRANTED IN PART and DENIED IN PART.

IT IS SO ORDERED. Dated this 5th day of May, 2025.

s/ John W. Broomes
JOHN W. BROOMES
UNITED STATES DISTRICT JUDGE